IN THE CLAIMS

1. (Original) A circuit comprising:

an active pull-up device;

a level shift circuit coupled to the active pull-up device wherein the active pull-up device is coupled to a one wire bus and the level shift circuit is also coupled to circuit ground.

2. (Original) The circuit of claim 1 where one connection point of the level shift circuit is coupled to a reference connection point of the active pull-up device and another connection point of the level shift circuit is connected to circuit ground.

3. (Original) The circuit of claim 1 where the active pull-up device has a voltage sense switch that is coupled to the level shift circuit.

4. (Original) The circuit of claim 1 where the level shift circuit is a diode with its cathode connected to circuit ground and its anode connected to a reference connection point of the active pull-up device.

5. (Original) The circuit of claim 1 where at least one I-button device is coupled to the one wire bus and coupled to circuit ground.

6. (Original) The circuit of claim 1 where a transceiver having a processor is coupled to the one wire bus and to circuit ground.

7. (Original) A circuit comprising:

a level shift circuit and an active pull-up device where the level shift circuit provides a reference voltage to the active pull-up device and the level shift circuit is connected to circuit ground.

8. (Original) The circuit of claim 7 where the active pull-up device is coupled to a one wire bus.

9. (Original) The circuit of claim 7 where one connection point of the level shift circuit is coupled to a reference point of the active pull-up device and another connection point of the level shift circuit is connected to ground.

10. (Original) The circuit of claim 7 where the active pull-up device has a voltage sense switch that is coupled to the level shift circuit.

11. (Original) The circuit of claim 7 where the level shift circuit is a diode with its cathode connected to circuit ground and its anode connected to a reference connection point of the active pull-up device.

12. (Original) The circuit of claim 7 where at least one I-button device is coupled to a one wire bus and coupled to circuit ground where the active pull-up device is coupled to the one wire bus.

13. (Currently amended) The circuit of claim ~~7~~ 8 where a transceiver having a processor is coupled to the one wire bus and to circuit ground.